Images in Clinical Tropical Medicine

Multifocal Bone and Visceral Melioidosis in a Cirrhotic Patient Identified by ^{99m}Tc MDP Bone Scan

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A 58-year-old diabetic male with hepatic cirrhosis presented with fever and vague bone pains. Technetium methylene diphosphonate (^{99m}Tc MDP) three phase bone scan (Figures 1 and 2) identified not only multiple sites of bone involvement but also extraskeletal renal involvement that was later proven by culture. *Burkholderia pseudomallei* was isolated from a blood culture, confirming a diagnosis of systemic melioidosis. Although lung abscess is the most common presentation disseminated disease often occurs, particularly in the presence of impaired host immunity, which was apparent in this patient. Pleural effusion, skin and soft tissue swellings, and liver and splenic abscesses may be encountered. Neurological involvement (brain stem encephalitis, cerebral abscess, cranial nerve

Three phase bone scan

FIGURE 1. ^{99m}Tc MDP regional three-phase bone scan showed multifocal bone involvement. Vascular and soft tissue phase images showed symmetrically increased vascularity and soft tissue tracer uptake in both knee joints. Increased soft tissue tracer uptake was noted in the left hip and femoral region.

Whole body bone scan – skeletal phase

FIGURE 2. ^{99m}Tc MDP whole-body bone scan. Skeletal phase images depict diffusely intense tracer uptake in the left femoral shaft with interspersed small cold defects. A hot spot is seen in left eighth rib posteriorly with associated increased tracer uptake in the left hip and right ankle joints. Increased tracer uptake is also seen in the bilateral tibial condyles. Incidentally, a cold defect was seen in right midpole of the kidney (bold arrow). On additional ultrasound examination, the lesion was confirmed to be an abscess. *B. pseudomallei* was isolated from an aspirate of pus.

palsies, and paraparesis), although less common, can be seen in 4% of cases.

Melioidosis¹ is a great masquerader, and it is often confused with staphylococcal abscesses in acute form, tuberculosis in chronic presentations, or a generalized sepsis. Aspirated pus may show caseating material similar to the material in tuberculosis, and tissue biopsy may show granuloma.

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